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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION V

DATE: SEP 6 1985

SUBJECT: Immediate Removal Request for the U.S.  
Scrap Site, Chicago, Illinois

FROM: Briand C. Wu, On-Scene Coordinator  
Western Response Unit (5HR-11/ERS-WRU)

TO: Valdas V. Adamkus  
Regional Administrator (5RA)

THRU: Basil G. Constantelos, Director  
Waste Management Division (5W)

PURPOSE

This is to request confirmation of your verbal approval to expend \$100,000 in order to extinguish the fire & smoke emanating from the ground at the U.S. Scrap site in Chicago, Illinois and your approval for an increase to \$200,000. The site is a waste disposal facility which shut down during the late 1970's. Verbal approval to initiate emergency action was given on August 16, 1985.

BACKGROUND

On August 16, 1985, the U.S. Environmental Protection Agency (U.S. EPA) responded to a request by the Illinois Environmental Protection Agency (IEPA) to investigate the fire at the U.S. Scrap site. Site inspection indicated that there is an environmental risk at the site. There are three locations where smoke was emanating from the ground. The first area is approximately 20'x 60' at the north end of the site, the second area is approximately 100'x 200' at the south end of the site, while the third area is approximately 20'x 20' at the southwest corner of the site.

HNU meter, explosion meter, oxygen meter and Dreager tube readings directly over the smoke (approximately 6 inches above the ground) indicated that there were: 50-80 ppm of organics, 15 ppm of H<sub>2</sub>S, LEL at 6%, Oxygen level at 16% (normal is 20.5% and anything less than 18% requires bottled air), HCN positive and 2 ppm of HCL.

Evaluation of the results, the condition of the smoke emanating from the ground, the organic vapor on the site, and information provided by the IEPA regarding the past operations of the site indicated that there is an underground fire and organic solvents and paint waste are buried on the site.

The site, which has no security, constitutes a hazard to public health and welfare by threat of fire and explosion, and by direct contact to hazardous materials.

Information obtained from former workers on the site indicates that shock sensitive materials (most probably ethers) are buried in drums in the railroad embankment which forms the west edge of the site. There are approximately 180-200 such drums reported in the railroad embankment.

#### PROPOSED ACTION

The initial action taken in response to the fire was to cover the areas emitting smoke with a 2-foot clay cap in order to deprive the fire of oxygen and the installation of temperature probes in the area to monitor the progress of the fire. We have also been conducting infrared overflights on a biweekly basis. Both the temperature probes and the infrared photography indicate that the fires are out or are receding. Additional clay was spread to cover hot areas revealed by the infrared outside of the original clay cap.

The following actions are proposed to provide site security.

1. The construction of an 8-foot chain link fence on the west and north sides of the site.
2. Continued monitoring of the fire including 10 additional probes and biweekly infrared overflights.
3. Appropriate magnetometer and or resistivity studies to locate the drums in the railroad embankment.

The costs to date are approximately \$90,000. We are requesting your approval for \$200,000 at this time to cover the fence, the clay cap, the monitoring and the surveys to locate the drums.

After the drums have been located a detailed estimate of the cost of excavation and disposal will be prepared. We anticipate that this will cost \$250,000 - \$300,000.

#### ENFORCEMENT

One of the owners of the site is Mr. Steve Martell. A responsible party search is in progress. Through his attorney, Mr. Martell was given verbal and written notice to secure the site, extinguish the underground burning and to remove the materials causing the fire. Mr. Martell, through his attorney, declined to perform any of these activities. He verbally agreed to pay for fencing the site but requested that EPA do the work.

REGIONAL RECOMMENDATION

Based on the nature of the threat present at the U.S. Scrap site, I recommend your approval of the expenditure of \$200,000 in order to temporarily contain the smoke emanating from the ground and provide time for a complete site evaluation and a responsible party search. You may approve or disapprove by signing below.

Approve: \_\_\_\_\_

*Naldy L. Salamey*

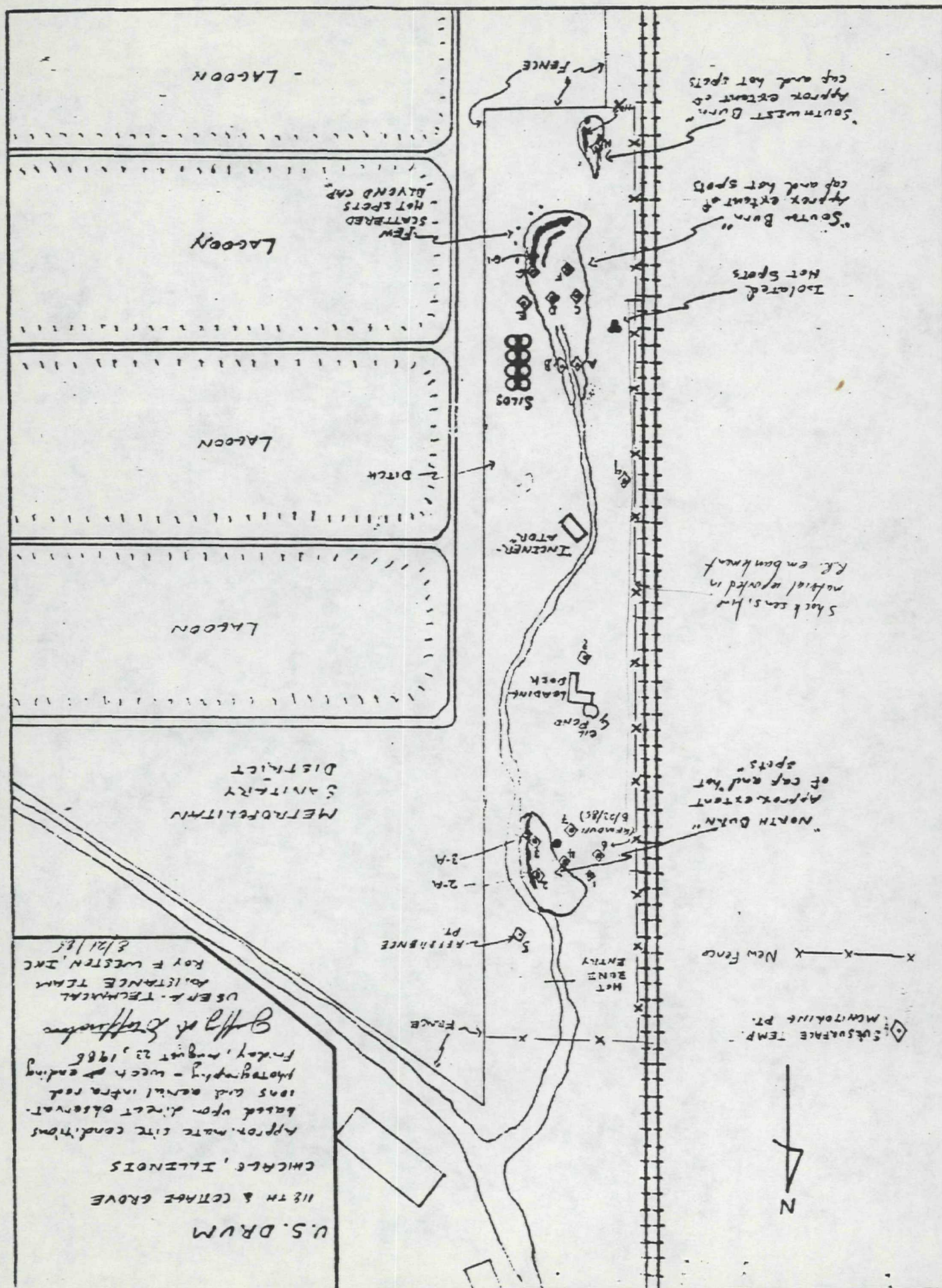
Date: \_\_\_\_\_

*9/09/85*

Disapprove: \_\_\_\_\_

Date: \_\_\_\_\_

Enclosure



U.S. DRUM

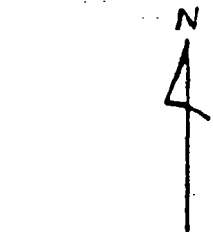
112TH & COTTON GROVE

CHICAGO, ILLINOIS

APPROXIMATE SITE CONDITIONS  
BASED UPON STREET OBSERVATIONS  
1985 AND AERIAL PHOTOGRAPHY  
TAKEN TODAY, AUGUST 22, 1986

*Jeffrey R. Stephenson*

U.S. AIR FORCE TECHNICAL  
ASSISTANCE TEAM  
KILL & WESTERN CORP  
2/1/86



◇ SURFACE TEMP.  
MONITORING PT.

X—X—X New Fence

HOT  
BURN  
ENTRY

FENCE

REFERENCE  
PT.

2-A

3-A

"NORTH BURN"  
APPROX. EXTENT  
OF CAP AND HOT  
SPOTS

TEMPORARY  
6/12/86

OIL  
FENCE

LEAKING  
HOLE

Shackens, low  
material reported in  
R.H. embankment

INCINER-  
ATOR

2 DITCH

Isolated  
Hot Spots

"South Burn"  
approx. extent of  
cap and hot spots

"Southwest Burn"  
approx. extent of  
cap and hot spots

FENCE

METROPOLITAN  
SANITARY  
DISTRICT

LAGOON

LAGOON

LAGOON

FEW  
SCATTERED  
HOT SPOTS  
BENEATH CAP

LAGOON

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION V

DATE SEP 27 1985

SUBJECT Ceiling Increase Request for Immediate Removal Actions at  
the U.S. Scrap Site, Chicago, Illinois - ACTION MEMORANDUM

FROM Briand C. Wu  
On-Scene Coordinator

TO Valdas V. Adamkus  
Regional Administrator

THRU: Basil C. Constantelos, Director  
Waste Management Division

PURPOSE

This is to request approval to expend Superfund resources to remove and dispose of approximately 400 drums which are buried in the railroad embankment immediately west of the landfill and which are believed to contain ethers which are shock sensitive. A ceiling increase of \$500,000 is requested to carry out this phase of the removal action.

BACKGROUND

On August 16, 1985, the U.S. Environmental Protection Agency responded to a request by the Illinois Environmental Protection Agency to investigate a fire at the U.S. Scrap Site. On that date, you gave verbal approval to expend \$100,000 to control the fires on the site. A confirming action memorandum for \$200,000 was approved on September 6, 1985, to control the fire, provide site security by fencing and to maintain temperature monitoring on the site.

During this removal action, several individuals who had worked at the site warned us to avoid the drums in the railroad embankment because they contain shock sensitive materials that could explode if they are disturbed. Many of these drums contain laboratory packs. The Illinois Research Hospital, University of Illinois, provided a list of chemical wastes that they typically produce which includes shock sensitive compounds such as tetrahydrofuran (THF) and ethers. THF is unstable when exposed to air and can explode violently. Ethers, when stored for a long period, form crystals which are unstable and can explode when disturbed. The drums buried in the railroad embankment are believed to contain "laboratory packs" which are collections of miscellaneous chemicals and wastes discarded by the laboratory. These are in bottles or small containers and there may be hundreds in each drum. The contents of some containers may be identifiable by labels; however, some containers may not contain what they were originally labelled for. Identifying the contents of each container is very expensive and hazardous since it requires handling of shock sensitive materials. Drums have been exposed by erosion in several areas along this embankment. The embankment has been scanned for radioactivity; but, none has been detected.



### THREAT

The presence of shock sensitive materials in the railroad embankment constitutes an immediate and significant risk of harm to human life and health through fire and/or explosion. The site, therefore, meets the requirements of paragraph 300.64 of the National Contingency Plan for immediate removal action.

### PROPOSED ACTION

Overlying soils will be carefully removed from areas where the presence of drums is indicated. Exposed drums will be removed with a remote drum grapple equipped with explosion shields. The drums will be staged. Any drum that is broken or in weak condition will be immediately overpacked.

Each drum, if necessary, will be detonated individually. Residual materials will be sampled for compatibility and disposal. Compatible materials will be bulked and either landfilled or incinerated depending on their composition.

Detonation sites if needed, will be selected by the OSC in areas remote from any hot spots or areas where organic vapors are being emitted. Detonation sites will be lined pits and/or ditched areas which are properly bunkered to contain the explosions.

Air monitoring programs have already been established under the original action to contain the fire and secure the site. These programs and site security will be maintained and enhanced to assure that any environmental impacts are mitigated.

### SUMMARY OF COSTS

	<u>Current Ceiling</u>	<u>Proposed Ceiling</u>
Cleanup Contractors	\$150,000	\$550,000
Intramural	25,000	60,000
TAT	25,000	90,000
Total Project Ceiling	\$200,000	\$700,000

### Remarks:

The site is not on the National Priorities List. Initial scoring was well below that required for listing.

Enforcement

Verbal notification was given to a potential responsible party for the site work approved to date. Verbal notification will also be given for this phase of the removal action.

Regional Recommendation

To eliminate the continuing threat posed to the nearby public and the environment consistent with the immediate removal criteria contained in section 300.65 of the National Contingency Plan, I recommend you approve this \$500,000 ceiling increase request, of which \$400,000 will be utilized by the private cleanup contractor to continue ongoing removal actions and to excavate and dispose of materials buried along the railroad embankment. The remaining \$100,000 will be used for mission support and intramural expenses. Your approval will raise the total project ceiling from \$200,000 to \$700,000. You may indicate your approval or disapproval by signing below.

Approve: \_\_\_\_\_

Alan Levin (Acting)  
Regional Administrator

Date: \_\_\_\_\_

9/30/75

Disapprove: \_\_\_\_\_

Regional Administrator

Date: \_\_\_\_\_



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION V

DATE: MAR 20 1986

SUBJECT: Six-Month Time Exemption to Allow the Continuation of Removal Activity  
at the U.S. Scrap Site, Chicago, Illinois - ACTION MEMORANDUM

FROM: Brian C. W. *B. H. Madany*  
On-Scene Coordinator *for*

TO: Valdas V. Adamkus  
Regional Administrator

THRU: Basil G. Constantelos *BGC*  
Waste Management Division

ISSUE

Continued response actions of a duration greater than 6 months cannot be undertaken unless an exemption to Section 104(c) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) is granted. The initial response action of the U.S. Scrap Site, Chicago, Illinois, took place in August 1985; the 6-month time limit expired in February 1986.

STATUTORY CRITERIA

Section 104(c) of CERCLA limits Federal emergency response to 6 months in duration unless three criteria are met: (1) continued response actions are immediately required to mitigate an emergency; (2) there is an immediate risk to public health and the environment; and (3) such assistance will not otherwise be provided on a timely basis.

DISCUSSION

The United States Environmental Protection Agency initiated emergency action on August 18, 1985, to exterminate an underground fire, removal and disposal of shock sensitive materials on the railroad embankment at U.S. Scrap which was approved verbally on August 18, 1985.

1. Continued response actions are immediately required to mitigate an emergency. Due to the difficulties involved in locating a proper disposal site for the waste material, this removal action cannot be completed by February 1986. It is anticipated that disposal of the waste material will be completed by May 1986.
2. There is an immediate risk to public health and the environment. The material cannot be stored on the site indefinitely without creating a risk to public health and the environment.

3. Such assistance will not otherwise be provided on a timely basis. We are making every effort to arrange for disposal, but RCRA regulations and limited availability of disposal facilities make it impossible to complete the action on a timely basis.

RECOMMENDATION

Because conditions at the site meet the CERCLA 104(c) criteria, I recommend that you approve an exemption from the 6-month time limit to allow continued removal activities at the Indiana Refinery site.

APPROVE:

Valdaz V. Pataunz  
REGIONAL ADMINISTRATOR

DATE:

3/20/86

DISAPPROVE:

\_\_\_\_\_  
REGIONAL ADMINISTRATOR

DATE: \_\_\_\_\_